

REMARKS

Entry of the foregoing and reconsideration of the subject application are respectfully requested in light of the comments which follow.

Claims 1-10 were pending in this application. In this response, claims 1 and 10 are amended, no claims are canceled, and claims 11-20 are added. Thus, claims 1-20 are pending.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: the original claims and Figure 2.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1, 2, 5-8, and 10 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,112,164 to Pano (hereinafter “*Pano*”) in view of U.S. Patent No. 6,705,805 to Lagerberg (hereinafter “*Lagerberg*”). Specifically, the Examiner alleges that *Pano* discloses the claimed limitations except a means for supplying cooling agent to the insert. The Examiner further alleges that *Lagerberg* discloses a cooling agent supplying means, and concludes that it would be obvious to combine *Pano* and *Lagerberg*.

Applicants respectfully traverse. As outlined in M.P.E.P. §§ 2141.02 and 2143.03, the references must teach or suggest all of the claim limitations. Claims 1 and 10 each recite that the cooling agent supplying means is mounted in a recess that is horizontally transverse to a longitudinal direction of the blade part. The Examiner appears to rely on *Lagerberg* for the recess that is transverse to a longitudinal direction of the blade part. See, e.g., p. 3 of the Office Action. However, *Lagerberg* teaches a cutting tool in which the coupling part is connected to the rear of the tool head, unlike *Pano* and Applicants’ cutting tools where the coupling part is

connected to the side of the tool head. *See, e.g., Lagerberg Fig. 1; Pano Fig. 1; and Specification Fig. 2.*

The Examiner has relied on the embodiment in *Lagerberg* in which the tube member (20) is designed to be mounted in a recess arranged vertically along the blade part. *See, e.g., Fig. 1.*

The tube member (20) is arranged vertically along the blade part so the cooling agent is directed upward toward the flank surface of a cutting insert. *See, e.g., col. 2, ll. 24-32.* However, a tube member that is vertically disposed along a blade part is not horizontally transverse to the longitudinal direction of the blade part. *Lagerberg* at least fails to suggest to one of ordinary skill in the art to apply a cooling agent supplying means to a tool part in which the coupling part is connected to the side of the tool head, and certainly fails to suggest arranging a cooling agent supplying means horizontally transverse to a longitudinal direction of the blade part.

Lagerberg specifically teaches a tool system where over-cooling and sub-cooling nozzles are used to cool and clear chips from the chip and flank surfaces of a cutting insert. *See, e.g., col. 2, ll. 24-32.* The proposed modification cannot render the prior art unsatisfactory for its intended purpose. *See In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).* See also M.P.E.P. § 2143.01 (V). To satisfactorily perform an over-cooling or sub-cooling function, the tube member and nozzle are angled so as to direct cooling agent in both vertical and longitudinal directions. A nozzle directing cooling agent from a direction horizontally transverse to the longitudinal direction would not perform the intended over-cooling or sub-cooling function, because over-cooling and sub-cooling require the cooling agent to come from above or below the insert. Therefore, it would not be obvious to modify *Lagerberg* to mount the tube

member horizontally transverse to a longitudinal direction of the blade part, because such a modification would render *Lagerberg* unsatisfactory for its intended purpose.

Dependent claims 2-9 and 13-20, which depend on claims 1 and 10, respectively, are also not obvious for at least the same reasons as for claim 1. For at least these reasons, no *prima facie* case of obviousness has been established, and the rejection should be withdrawn.

New independent claim 11 is claim 3 rewritten in independent form, and claim 12 is claim 10 incorporating the limitation of claim 3. The Examiner indicated that the subject matter of claim 3 in combination with the basic claim in which it depended was allowable. Therefore, new independent claims 11 and 12 are allowable.

CONCLUSION

Should any questions arise in connection with this application, or should the Examiner believe a telephone conference would be helpful in resolving any remaining issues pertaining to this application, it is respectfully requested that the undersigned be contacted at the number indicated below.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0573. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully Submitted,

Date: November 17, 2008 By: Christopher P. Bruenjes
DRINKER BIDDLE & REATH LLP Christopher P. Bruenjes
Customer No. 55694 Reg. No. 62,941
1500 K Street, N.W., Suite 1100 Attorney for Applicants
Washington, D.C. 20005-1209 Tel. No.: (202) 230-5162
Tel. No.: 202-842-8800 Fax No.: (202) 842-8465
CPB:mk